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Product datasheet for RC221444

CACTIN (NM_001080543) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACTIN (NM_001080543) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CACTIN
Synonyms:	C19orf29; fSAPc; NY-REN-24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC221444 representing NM_001080543
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGTCGGGACACACGCTCGCGCTCGCGGTCCGCGGGTCGCCGGGGCCGAAGGCGGCAGAGTCAGAGCG
GGAGCCGAAGTCGGAGCAGGAGCCATGGGCGGCGAAACCGACGGCGCCGGGAGGACGAGGGACGGCGCAG
ACGGAGGCGGCGGAGCCGGGAGCGCAGGTCAGATTCAGAGGAAGAGCGGTGGCAGCGCTCAGGGATGCGA
AGCCGGAGCCCCCCGCGGCCCAAGTGGCACTCAAGAGATGGGTCCTCTCAGTCGGACTCAGGAGAGGAGC
AGTCACGGGGCCAGTGGGCTCGCCGGCGACGGCGCGCACGCTCGTGGTCTCCTAGCTCCTCAGCATCCAG
CTCCGCGTCTCCAGGGCGATCCCAGAGCCCCCGGGCGGCCGCGGCTGCCCTGAGCCAGCAGCAGAGCCTG
CAGGAGCGGCTGCGGCTGCGGGAGGAGCGGAAGCAGCAGGAGGAGCTGATGAAGGCCTTCGAGACGCCCG
AGGAGAAGCGCGCACGGCGGCTGGCCAAGAAGGAGGCCAAGGAGCGCAAGAAGCGGGAGAAGATGGGCTG
GGGTGAGGAGTACATGGGCTACACCAACACCGACAACCCCTTCGGAGACAACAACCTGCTGGGCACCTTC
ATCTGGAATAAGGCCCTGGAGAAGAAGGGGATCAGCCACCTGGAGGAGAAGGAGCTGAAGGAGCGGAACA
AGAGGATCCAGGAGGACAACCGGCTGGAGCTGCAGAAGGTGAAGCAGCTGCGGCTGGAGCGGGAGCGGGA
GAAGGCCATGCGCGAGCAGGAGCTGGAGATGCTGCAGCGCGAGAAGGAGGCAGAGCACTTCAAGACATGG
GAGGAGCAGGAGGACAACTTCCACCTCCAGCAGGCCAAGCTGCGTTCCAAGATCCGCATCCGGGACGGGC
GGGCCAAGCCCATCGACCTGCTGGCCAAGTACATCAGCGCTGAGGATGACGATCTGGCCGTGGAGATGCA
TGAGCCCTACACGTTCCTCAACGGCCTCACCGTGGCCGACATGGAGGACCTGCTGGAGGATATCCAGGTC
TACATGGAGCTGGAGCAGGGCAAGAACGCCGACTTCTGGCGGGACATGACCACCATCACCGAGGACGAGA
TCTCCAAGCTCCGCAAGCTGGAGGCCTCGGGCAAGGGGCCAGGTGAGCGCCGCGAGGGGGTCAACGCCTC
CGTCAGCTCTGATGTGCAGTCGGTGTTCAAGGGGAAGACATACAACCAGCTGCAGGTCATCTTCCAGGGC
ATCGAGGGCAAAATCCGCGCTGGTGGCCCCAACCTGGACATGGGCTACTGGGAGAGCCTCCTGCAGCAGC
TTCGTGCCCACATGGCGCGGGCCCGGCTGCGTGAGCGCCACCAGGACGTGCTGCGGCAGAAGCTGTACAA
ACTGAAGCAGGAGCAGGGCGTGGAGAGCGAGCCGCTGTTCCCCATCCTCAAGCAGGAGCCCCAGTCCCCC
AGCCGCAGCCTGGAGCCTGAGGACGTGGCGCCCACCCCGCCCGGGCCCTCCTCGGAGGGCGGCCCCGCGG
AGGCCGAGGTGGACGGCGCGACCCCGACAGAGGGCGACGGCGACGGGGACGGTGAGGGCGAGGGCGAGGG
CGAGGCGGTGCTCATGGAGGAGGACCTGATCCAGCAGAGCCTGGACGACTACGACGCCGGCAGGTACAGC
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GCCTGCAGCTCTCGCGCCAGCAGCTCCAGGTCACGGGAGACGCCAGCGAGAGCGCCGAGGACATCTTCTT
CCGGCGGGCCAAGGAGGGCATGGGCCAGGACGAGGCGCAGTTCAGCGTGGAGATGCCACTCACCGGCAAG
GCCTACCTGTGGGCCGACAAGTACCGGCCACGCAAGCCGCGCTTCTTCAACCGCGTGCACACGGGCTTCG
AGTGGAACAAGTACAACCAGACGCACTACGACTTTGACAACCCACCGCCCAAGATCGTGCAGGGATACAA
GTTCAACATCTTCTACCCCGACCTCATCGACAAGCGCTCCACGCCCGAGTACTTCCTGGAGGCCTGCGCC
GACAACAAGGATTTCGCCATCCTGCGCTTCCACGCGGGGCCGCCCTACGAGGACATCGCTTTCAAGATCG
TCAACCGCGAGTGGGAATACTCGCACCGCCACGGCTTCCGCTGCCAGTTTGCCAATGGCATCTTCCAGCT
GTGGTTTCACTTCAAGCGCTACCGCTATCGGCGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221444 representing NM_001080543
Red=Cloning site Green=Tags(s)

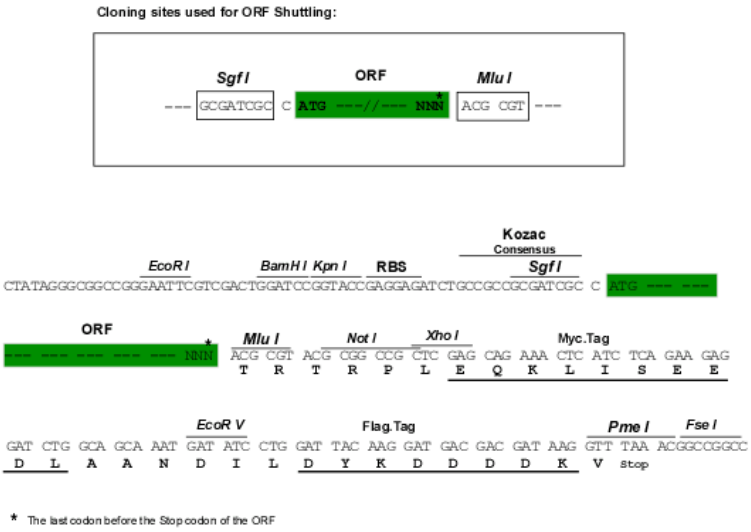
MGRDTRSRSRSAGRRGRRRQSQSGSRSRSRSHGRRNRRRREDEGRRRRRRRSRERRSDSEEERWQRSGMR
SRSPPRPKWHSRDGSSQSDSGEEQSRGQWARRRRRARSWSPSSSASSSASPGRSQSPRAAAAALSQQQSL
QERLRLREERKQQEELMKAFETPEEKRARRLAKKEAKERKKREKMGWGEEYMGYTNTDNPFGDNNLLGTF
IWNKALEKKGISHLEEKELKERNKRIQEDNRLELQKVKQLRLERERERKAMREQELEMLQREKEAEHFKTW
EEQEDNFHLQQAKLRSKIRIRDGRAKPIDLLAKYISAEDDDLAVEMHEPYTFLNGLTVADMEDLLEDIQV
YMELEQGKNADFWRDMTTITEDEISKLRKLEASGKGPGERREGVNASVSSDVQSVFKGKTYNQLQVIFQG
IEGKIRAGGPNLDMGYWESLLQQLRAHMARARLRERHQDVLRQKLYKLKQEQGVESEPLFPILKQEPQSP
SRSLEPEDVAPTPPGPSSEGGPAEAEVDGATPTEGDGDGDGEGEGEGEAVLMEEDLIQQSLDDYDAGRYS
PRLLTAHELPLDAHVLEPDEDLQRLQLSRQQLQVTGDASESAEDIFFRRAKEGMGQDEAQFSVEMPLTGK
AYLWADKYRPRKPRFFNRVHTGFEWNKYNQTHYDFDNPPPKIVQGYKFNIFYPDLIDKRSTPEYFLEACA
DNKDFAILRFHAGPPYEDIAFKIVNREWEYSHRHGFRCQFANGIFQLWFHFKRYRYRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4049_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001080543

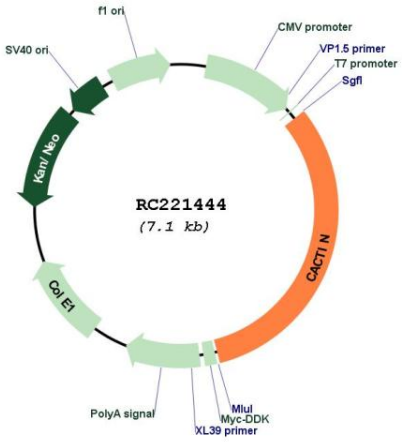
ORF Size: 2274 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

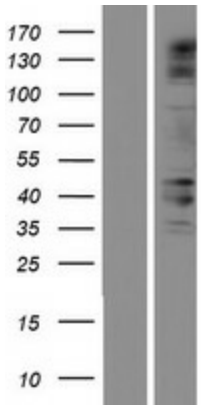
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001080543.1, NP_001074012.1
RefSeq Size:	3625 bp
RefSeq ORF:	2277 bp
Locus ID:	58509
UniProt ID:	Q8WUQ7
Cytogenetics:	19p13.3
MW:	88.5 kDa
Gene Summary:	Involved in the regulation of innate immune response. Acts as negative regulator of Toll-like receptor and interferon-regulatory factor (IRF) signaling pathways. Contributes to the regulation of transcriptional activation of NF-kappa-B target genes in response to endogenous proinflammatory stimuli. May play a role during early embryonic development. Probably involved in pre-mRNA splicing.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC221444



Western blot validation of overexpression lysate (Cat# [LY421097]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221444 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).